WHAT IS CLAIMED IS:

1. A method for detecting an enteroviral infection in a subject's heart, the method comprising *in vivo* imaging of myocytes for the presence of a dystrophin cleavage product therein, wherein the detection is performed as soon as 12 hours following a suspected infection by administering a diagnostically effective amount of detectably labeled dystrophin epitope-specific antibody or Fab fragment thereof into the subject's cardiovascular circulation or tissue, wherein binding of the antibody indicates that a dystrophin cleavage product resulting from an enteroviral infection is present in one or more of the myocytes.

2. The method according to Claim 1, wherein the dystrophin epitope-specific antibody is specific to a dystrophin cleavage product produced by enteroviral protease 2A cleavage of the rod domain of dystrophin.

3. The method according to Claim 2, wherein the rod domain encompasses a hinge segment of dystrophin.

4. The method according to Claim 2, wherein the dystrophin cleavage product is the 588 cleavage product.

5. The method according to Claim 3, wherein the dystrophin cleavage product is the 2434 cleavage product.

6. The method according to Claim 1, wherein the enteroviral infection is a Coxsackievirus infection.

7. A method for detecting an enteroviral infection in a subject's heart, the method comprising *in vitro* immunological detection of a dystrophin cleavage product in blood or cardiovascular tissue obtained from the subject, wherein the detection is performed in an assay using a detectably labeled dystrophin eptitope-specific antibody or Fab fragment thereof, wherein binding of the antibody indicates that a dystrophin cleavage product resulting from an enteroviral infection is present in the blood or cardiovascular tissue assayed.

8. The method according to Claim 7, wherein the dystrophin epitope-specific antibody is specific to a dystrophin cleavage product produced by enteroviral protease 2A cleavage of the rod domain of dystrophin.

9. The method according to Claim 8, wherein the rod domain encompasses a hinge segment of dystrophin.

10. The method according to Claim 8, wherein the dystrophin cleavage product is the 588 cleavage product.

11. The method according to Claim 9, wherein the dystrophin cleavage product is the 2434 cleavage product.

12. The method according to Claim 7, wherein the enteroviral infection is a Coxsackievirus infection.

13. The method according to Claim 7, wherein the detection is performed on blood from the subject at least 12 hours following a suspected infection.

14. A kit for use in detecting an enteroviral infection in a subject's heart by *in vivo* imaging of myocytes for the presence of a dystrophin cleavage product therein, the kit comprising a diagnostically effective amount of detectably labeled dystrophin epitope specific antibody or Fab fragment thereof.

15. The kit according to Claim 14, wherein the dystrophin epitope-specific antibody is specific to a dystrophin cleavage product produced by enteroviral protease 2A cleavage of the rod domain of dystrophin.

16. The kit according to Claim 15, wherein the rod domain encompasses a hinge segment of dystrophin.

17. The kit according to Claim 15, wherein the dystrophin cleavage product is the 588 cleavage product.

18. The kit according to Claim 16, wherein the dystrophin cleavage product is the 2434 cleavage product.

19. The kit according to Claim 14, wherein the enteroviral infection is a Coxsackievirus infection.

20. A kit for use in detecting an enteroviral infection in a subject's heart by *in vitro* detection of a dystrophin cleavage product in the blood or tissue sample from the heart of a host, the kit comprising a diagnostically effective amount of detectably labeled dystrophin epitope-specific antibody or Fab fragment thereof.

21. The kit according to Claim 20, wherein the dystrophin epitope-specific antibody is specific to a dystrophin cleavage product produced by enteroviral protease 2A cleavage of the rod domain of dystrophin.

22. The kit according to Claim 21, wherein the rod domain encompasses a hinge segment of dystrophin.

23. The kit according to Claim 21, wherein the dystrophin cleavage product is the 588 cleavage product.

24. The kit according to Claim 22, wherein the dystrophin cleavage product is the 2434 cleavage product.

25. The kit according to Claim 20, further comprising control antibodies and assay reagents.

26. The kit according to Claim 25, wherein the control antibodies are specific for protease 2A substrates in the heart other than dystrophin.

27. The kit according to Claim 14, further comprising a carrier for the dystrophin epitope-specific antibody.

28. The kit according to Claim 20, further comprising a carrier for the dystrophin epitope-specific antibody.

29. The kit according to Claim 27, wherein the carrier is a protein.

30. The kit according to Claim 28, wherein the carrier is selected from the group of carriers consisting of glass, polystyrene, poly-propylene, polyethylene, dextran, nylon, amylases, natural and modified celluloses, poly-acrylamides, agaroses and magnetite.